

CLAIMS

Therefore, having thus described the invention, at least the following is claims:

- 1 1. A cap for attachment to an end of a post with four sides, comprising:
 - 2 (a) a base with a top and bottom and with an aperture defined by four
3 sides, each with an inside and outside, which is designed to fit over the end of a post with
4 each side having a top and bottom, said base having means for attaching to a post with at
5 least two sides of the base supporting a locking section comprising a locking ledge on the
6 outside of the side at the top and a locking ramp above the top of the side which slopes
7 downwardly to the locking ledge;
 - 8 (b) a top member with four sides with an inside and outside and a top
9 extending between the sides, with at least two sides supporting a locking bar extending
10 into the aperture from the inside of a side for locking over a locking ledge on the base;
11 and
 - 12 (c) there being sufficient flexibility in the base and top member to
13 allow each locking bar to slide over the corresponding ramp and locking ledge of the
14 base, but with sufficient rigidity to secure the top member to the base.
- 1 2. The cap of claim 1, in which each side of the base has a locking section
2 and each side of the top member has a locking bar.
- 1 3. The cap of claim 1, in which the means for attaching the base to a post
2 comprises at least one tab attached to a side of the base, said tab projecting into the
3 aperture of said base, said tab having a hole for receiving an elongated fastening member
4 that can be extended into a solid material in the end of post to secure the base to the post.
- 1 4. The cap of claim 2, in which the means for attaching the base to a post
2 comprises at least one tab attached to a side of the base, said tab projecting into the
3 aperture of said base, said tab having a hole for receiving an elongated fastening member
4 that can be extended into a solid material in the end of post to secure the base to the post.

1 5. The cap of claim 5, in which there are two tabs.

1 6. The cap of claim 1, in which the inside of the sides of the base near the
2 bottom of a side has a plurality of break-away ribs which project into the aperture which
3 are designed to insure the base fits snugly to the end of posts of different sizes, said
4 breakaway ribs being designed to break if the end of the post is too large so that the end
5 of the post will fit snugly into said aperture of the base.

1 7. The cap of claim 1, in which the sides of the base have a plurality of steps
2 with a step on each side being in the same plane as a step on each of the other sides of the
3 base, with the size of the aperture of the base increasing from the steps in the plane
4 closest to the bottom of the base to the top of the base.

1 8. The cap of claim 1, in which the top of the top member is pyramid shaped.

1 9. The cap of claim 1, in which the top of the top member has a middle
2 section and a perimeter with the middle section being at least substantially flat.

1 10. The cap of claim 9, in which the middle section of the top member has a
2 support that extends into the aperture in the base when the top member and base are
3 locked together to support the top member when the cap is installed on a post.

1 11. The cap of claim 7, in which the means for attaching the base to a post is
2 the provision of at least one hole in a side through which an elongated fastening member
3 can be extended into a side of the post to secure the base to a post.

1 12. The cap of claim 1, in which the base has four corners, with a corner
2 between adjoining sides, each corner having a stepped corner structure attached to the
3 base, with a plurality of steps in each corner, with a step in each corner being in the same
4 plane as a step in all of the other corners, with the steps in a single plane being capable of
5 receiving the end of a post of a particular size, with the aperture formed by the steps in
6 the same plane near the bottom of the base being larger than the aperture formed by steps
7 in the same plane near the top of the base to accommodate the end of post of different
8 sizes.

1 13. The cap of claim 2, which is made of a plastic material.

1 14. The cap of claim 13, which has sufficient flexibility in each side on the
2 base supporting a locking ledge and each side on the top member supporting a locking
3 bar to enable the locking bars to be snapped into the locked position, but having sufficient
4 rigidity to keep the bars in a locked position under normal conditions.

1 15. The cap of claim 14, which has a plurality of guides on the top of the base
2 to guide the top member into a locked position with the base.

1 16. The cap of claim 14, in which each locking ramp on the base has a
2 plurality of ridges sloping downwardly to the locking ledge to facilitate the locking bar of
3 the top member sliding over the locking ledge.

1 17. A plastic cap for attachment to the end of a post with four sides,
2 comprising:

3 (a) a base with a top and bottom and with an aperture defined by four
4 sides, each with an inside and outside, which is designed to fit over the end of a post with
5 each side having a top and bottom, said base having at least one tab attached to a side of
6 the base, said tab projecting into the aperture of said base, said tab having a hole for
7 receiving an elongated fastening member that can be extended into any solid material in
8 the end of post to secure the base to the post with at least two sides of the base supporting
9 a locking section comprising a locking ledge on the outside of the side at the top and a
10 locking ramp above the top of the side which slopes downwardly to the locking ledge;

11 (b) a top member with four sides with an inside and outside and a top
12 extending between the sides, with at least two sides supporting a locking bar extending
13 into the aperture from the inside of a side for locking over a locking ledge on the base;
14 and

15 (c) there being sufficient flexibility in the base and top member to
16 allow each locking bar to slide over the corresponding ramp and locking ledge of the
17 base, but with sufficient rigidity to secure the top member to the base.

1 18. The plastic cap of claim 17, in which each side of the base has a locking
2 section and each side of the top member has a locking bar.

1 19. The plastic cap of claim 18, in which there are at least two tabs.

1 20. The plastic cap of claim 18, in which the inside of the sides of the base
2 near the bottom of a side has a plurality of break-away ribs which project into the
3 aperture which are designed to insure the base fits snugly to the end of posts of different
4 sizes, said breakaway ribs being designed to break if the end of the post is too large so
5 that the end of the post will fit snugly into said aperture of the base.

1 21. The plastic cap of claim 18, in which the top of the top member has a
2 middle section and a perimeter with the middle section being at least substantially flat.

1 22. The plastic cap of claim 18, in which the top of the top member is pyramid
2 shaped.

1 23. The plastic cap of claim 18, which has a plurality of guides on the top of
2 the base to guide the top member into a locked position with the base.

1 24. The plastic cap of claim 18, in which each locking ramp on the base has a
2 plurality of ridges sloping downwardly to the locking ledge to facilitate the locking bar of
3 the top member sliding over the locking ledge.

1 25. A plastic cap for attachment to the end of a post with four sides,
2 comprising:

3 (a) a base with a top and bottom and with an aperture defined by four
4 sides, each with an inside and outside, which is designed to fit over the end of a post with
5 each side having a top and bottom, said base having at least one hole in a side through
6 which an elongated fastening member can be extended into a side of the post to secure
7 the base to a post, with at least two sides of the base supporting a locking section
8 comprising a locking ledge on the outside of the side at the top and a locking ramp above
9 the top of the side which slopes downwardly to the locking ledge, said base having four
10 corners, with a corner between adjoining sides, each corner having a stepped corner
11 structure attached to the base, with a plurality of steps in each corner, with a step in each
12 corner being in the same plane as a step in all of the other corners, with the steps in a
13 single plane being capable of receiving the end of a post of a particular size, with the
14 aperture formed by the steps in the same plane near the bottom of the base being larger
15 than the aperture formed by steps in the same plane near the top of the base to
16 accommodate the end of post of different sizes;

17 (b) a top member with four sides with an inside and outside and a top
18 extending between the sides, with at least two sides supporting a locking bar extending
19 into the aperture from the inside of a side for locking over a locking ledge on the base;
20 and

21 (c) there being sufficient flexibility in the base and top member to
22 allow each locking bar to slide over the corresponding ramp and locking ledge of the
23 base, but with sufficient rigidity to secure the top member to the base.

1 26. The plastic cap of claim 25, in which each side of the base has a locking
2 section and each side of the top member has a locking bar.

1 27. The plastic cap of claim 26, in which the top of the top member has a
2 middle section and a perimeter with the middle section being at least substantially flat.

1 28. The plastic cap of claim 26, in which the top of the top member is pyramid
2 shaped.

1 29. The plastic cap of claim 26, which has a plurality of guides on the top of
2 the base to guide the top member into a locked position with the base.

1 30. The plastic cap of claim 29, in which each locking ramp on the base has a
2 plurality of ridges sloping downwardly to the locking ledge to facilitate the locking bar of
3 the top member sliding over the locking ledge.